



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,465	07/24/2003	Damian G. Bonicatto	11838.0057-US-01	1276
23552	7590	06/12/2006	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			LEE, BENJAMIN C	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/626,465

Applicant(s)

BONICATTO ET AL.

Examiner

Benjamin C. Lee

Art Unit

2612

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Detailed Office Action***

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/3/06 has been entered.

***Claim Status***

2. Claims 1-9 are pending.

***Claim Rejections - 35 USC § 103***

3. Amended claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van der Kaay et al. (US Pat. No. 6,393,126 B1) in view of Wachob et al. (US Pat. No. 5,334,975) and Hunt (US Pat. No. 6,154,488).

Van der Kaay et al. discloses a system for data communication with an endpoint transceiver (Figs. 2 and 4 showing bi-directional communication inherently including endpoint transceiver) located at customer premise (208), the system comprising: a time server (Trusted Master Clock (TMC) 204 in electrical communication with the transceiver according to Figs. 2 and 4 which show the application end providing bi-directional communication using the inherent transceiver) configured to retrieve the time (e.g., time from National Timing Authority (NTA)); a substation controller (Trusted Local Clock (TLC) 106) in communication with a communication medium and includes a substation transceiver (Figs. 2 and 4 also showing the Local Clock station 106 providing two way communication, and therefore, inherently a transceiver) and a substation

Art Unit: 2612

programmable circuit (col. 9, lines 30-65) that includes a substation clock (e.g., timing engine), the substation programmable circuit programmed to periodically retrieve the time (col. 8, lines 25-28 and col. 15, lines 19-21) from the time server (MTC 204) to calibrate the substation clock to the retrieved time (col. 6, lines 50-52 and 57-63 and col. 7, lines 35-40); and to control the substation transceiver to transmit the time to the point transceiver (col. 9, lines 31-36).

Van der Kaay et al. differs from amended claim 1 by teaching communicating or distributing validated/calibrated time to remote devices but not disclosing that the distribution of the retrieved time is done via the claimed power distribution line as the communication medium in which the power distribution line includes at least one transformer that steps down a power signal from a first voltage to a second voltage.

However, as taught by Wachob et al, global time reference can be communicated or distributed to residential household appliances via telephone line, wireless system, coaxial cable, fiber cable or power lines as alternatives (col. 3, lines 20-60) whereby a power line within a residence constitutes a power distribution line in that power is distributed to power-consuming devices throughout various locales in the residence via the line. Furthermore, Hunt teaches that time information can be transmitted from a remote location (utility station) to a customer site through the power distribution line including power step-down transformers (col. 5, lines 14-25 and Figs. 1-2).

In view of the teachings by Van der Kaay et al., Wachob et al. and Hunt, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that various types of distribution system known in the art including power distribution line communication as taught by Wachob et al. can be used as alternatives in Van der Kaay et al. in order to distribute

Art Unit: 2612

accurate global reference times to customer premises endpoint devices having endpoint transceivers, and furthermore to specifically use a power distribution line communication method as taught by Wachob et al. and Hunt so that accurate time base information can be communicated from a remote location to the end point transceiver through existing power distribution lines having step-down transformers so that separate/additional distribution medium is unnecessary to reduce cost associated with utilizing such additional/separate distribution medium otherwise required.

2) Regarding claims 2 and 3, the system of Van der Kaay et al. is used for time adjustment (col. 8, lines 25-35). Fig. 4 shows many different local clock servers or hosts 106, therefore, they inherently can be located in different geographic regions so that adjustment to the correct time is in the context of the correct time zone.

3) Regarding claim 4, examiner takes Official notice that adjusting the time for daylight saving is well known in the art and would have been an obvious modification to the combination of Van de Kaay et al., Wachob et al. and Hunt in order to accurately adjust time due to different geographic regions and daylight savings practice.

4) Regarding claim 5, the time retrieved by the time server of Van der Kaay et al. is Universal Time Coordinate UTC (col. 6, lines 12-14).

5) Regarding claim 6, Van der Kaay et al. further disclosed that the time can be retrieved from the global positioning system (col. 3, lines 44-46).

6) Regarding claim 7, Van der Kaay et al. discloses that the time can be retrieved from an atomic clock (col. 4, lines 4-5), and as disclosed above, Wachob et al. teaches reference time can be transmitted via a wireless (radio) system.

Art Unit: 2612

7) Regarding claim 8, as disclosed by Van der Kaay et al, the upper clock is used for periodically calibrating and certifying the lower clock. Whether it does in every few second, minutes or hours is merely depending on the need of the accuracy of the application or device. Therefore, it would have been obvious to do it more frequently in order to have a more accurate time.

8) Regarding claim 9, as disclosed by Van der Kaay et al (col. 10, lines 5-43), the application 208 calibrates the clock to the retrieved time stamp and operates under programmable layers. Therefore, the endpoint is programmable in the manner claimed.

#### ***Response to Arguments***

4. Applicant's arguments filed 5/3/06 have been fully considered but they are moot in view of new ground of rejection.

1) Applicant's arguments are directed to the amendment, which is met by the new prior art of Hunt. Please refer to the above new grounds of rejection using the prior art combination of Van der Kaay et al. (US Pat. No. 6,393,126 B1) in view of Wachob et al. (US Pat. No. 5,334,975) and Hunt (US Pat. No. 6,154,488).


#### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (571) 272-2963. The examiner can normally be reached on Mon -Thu 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Benjamin C. Lee  
Primary Examiner  
Art Unit 2612

B.L.